

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: INVUE

Report Number: P676322

Luminaire Tested: **CCW-SA-1E-830-U-T2-HSS**

Issue Date: 04/25/2023



Test Information

Test Method: LM-79-08
Report Number: P676322
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-1E-830-U-T2-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @1050mA w/
T2 distribution lens and House Side Shield
Light Source: (16) 3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

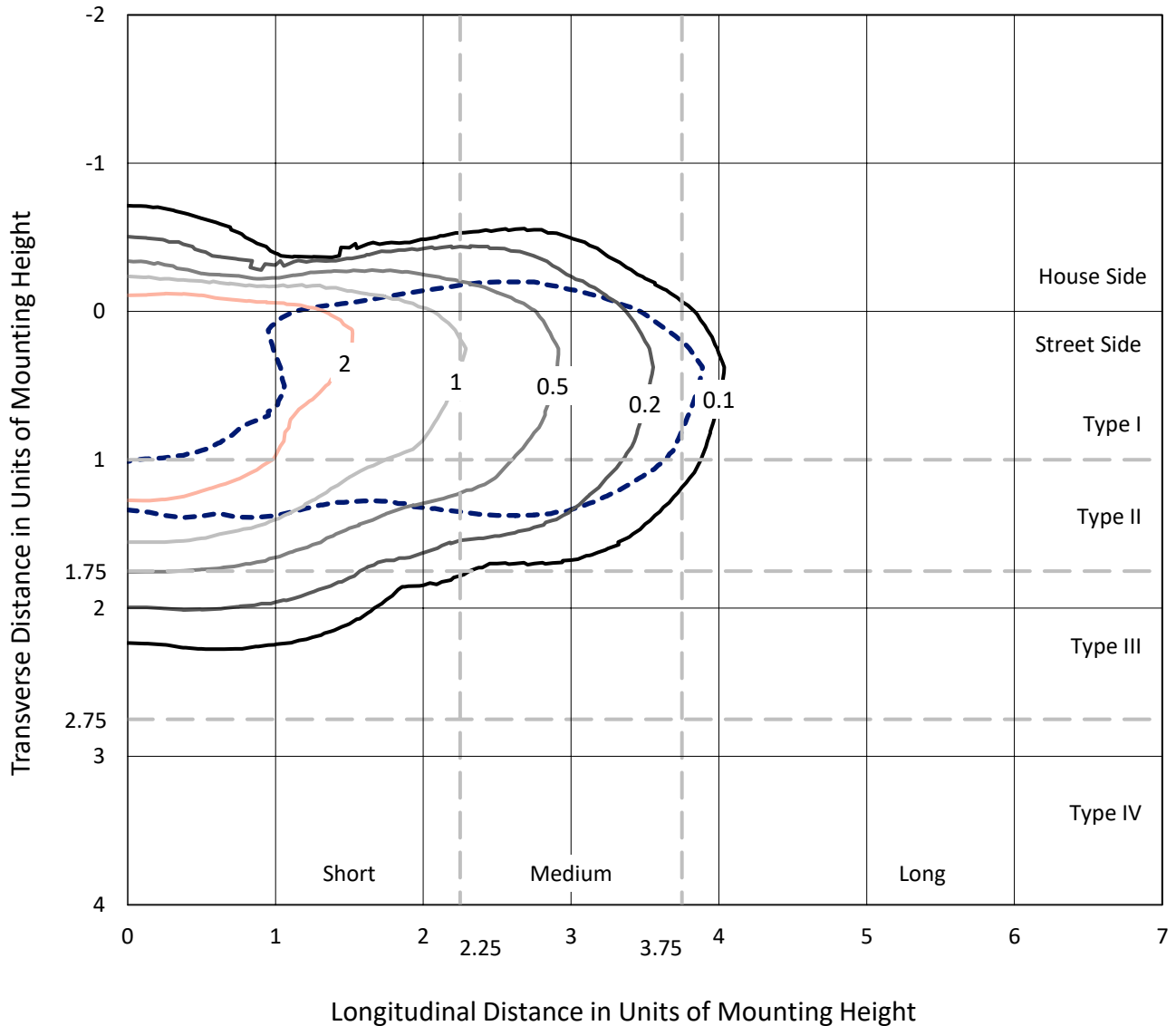
Lumens per Lamp: N/A
Luminaire Lumens: 4194.3 lumens
Efficiency: N/A
Efficacy: 74.8 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 56.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Iso-Footcandle Lines of Horizontal Illumination

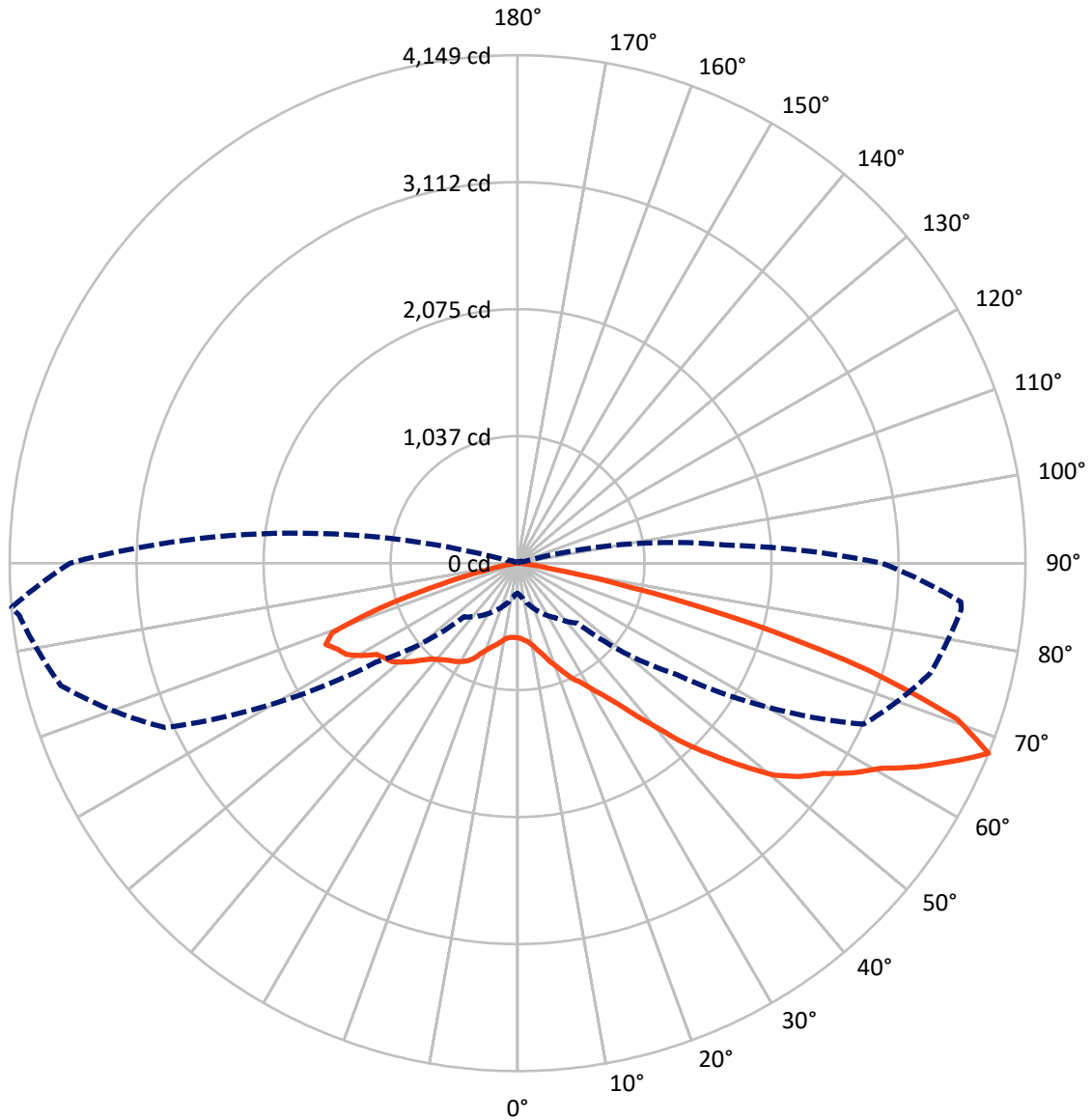
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 3.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 275-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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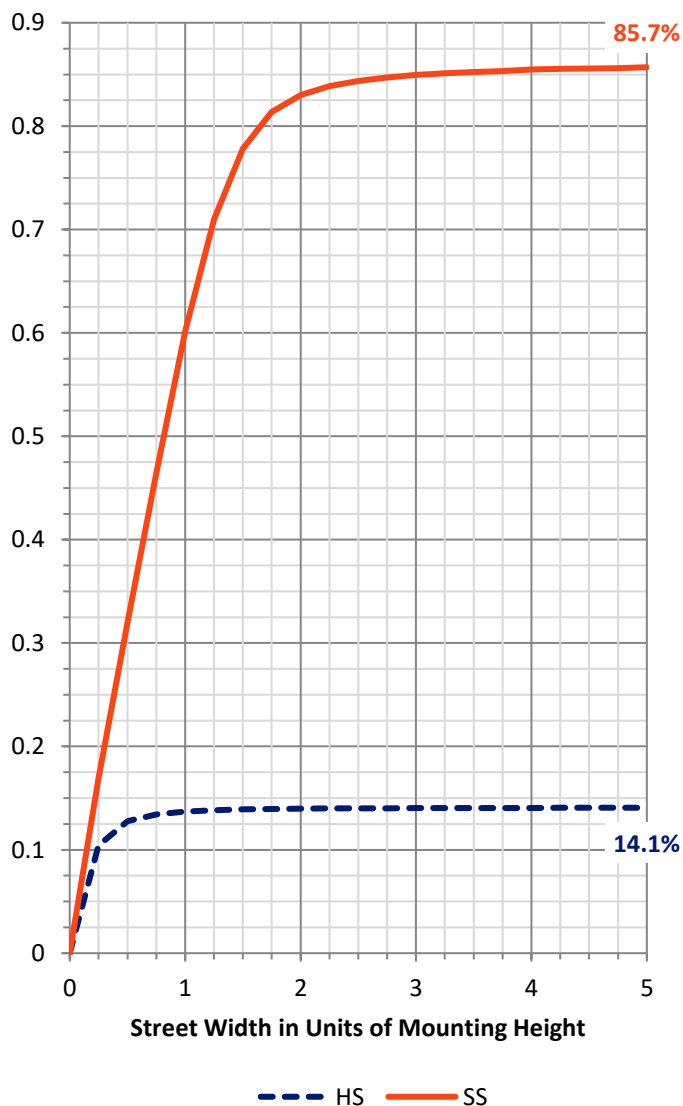
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	595.9	0.0	595.9
	% Fixture	14.2	0.0	14.2
Street Side	Lumens	3598.4	0.0	3598.4
	% Fixture	85.8	0.0	85.8
Total	Lumens	4194.3	0.0	4194.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.6	1.3
10°-20°	149.6	3.6
20°-30°	248.4	5.9
30°-40°	427.3	10.2
40°-50°	767.8	18.3
50°-60°	1093.1	26.1
60°-70°	996.6	23.8
70°-80°	424.4	10.1
80°-90°	31.6	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	4194.3	100.0
0°-180°	4194.3	100.0



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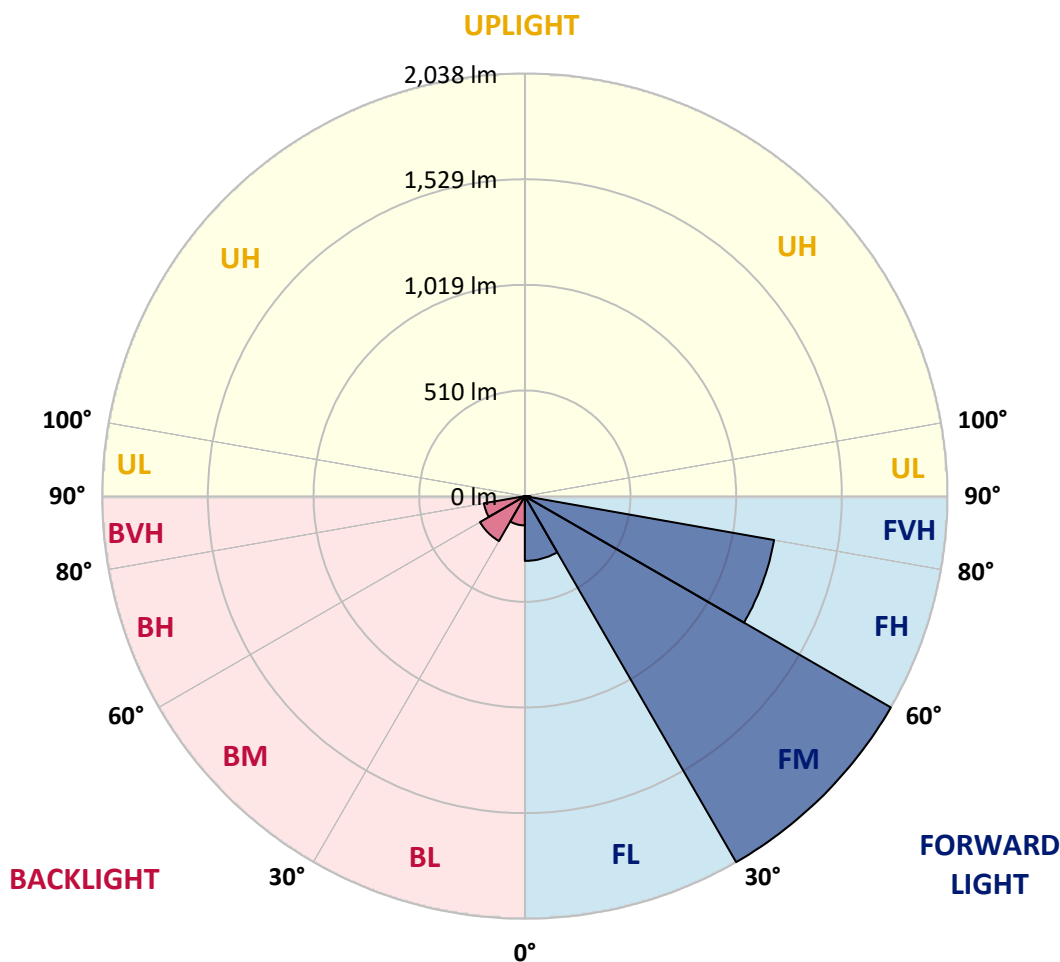
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	312.5	7.4			
FM (30°-60°)	2038.4	48.6			
FH (60°-80°)	1220.7	29.1			G1/1800
FVH (80°-90°)	26.8	0.6			G1/100
BL (0°-30°)	141.1	3.4	B1/500		
BM (30°-60°)	249.8	6.0	B1/1000		
BH (60°-80°)	200.2	4.8	B1/500		G1/500
BVH (80°-90°)	4.8	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	84°	85°
0°	609.9	609.9	609.9	609.9	609.9	609.9	609.9	609.9	609.9	609.9	609.9
2.5°	631.9	637.9	637.9	635.9	629.9	625.9	623.9	619.9	615.9	615.9	617.9
5°	637.9	631.9	639.9	629.9	629.9	629.9	637.9	633.9	631.9	621.9	621.9
7.5°	637.9	631.9	631.9	637.9	631.9	635.9	645.9	641.9	649.9	631.9	635.9
10°	619.9	617.9	621.9	629.9	631.9	639.9	649.9	669.9	671.9	659.9	657.9
12.5°	583.9	581.9	595.9	599.9	623.9	643.9	673.9	689.9	707.9	701.9	689.9
15°	557.9	561.9	571.9	587.9	609.9	645.9	679.9	715.9	747.9	739.9	735.9
17.5°	567.9	565.9	567.9	577.9	605.9	641.9	699.9	741.9	787.9	787.9	791.9
20°	597.9	603.9	601.9	595.9	609.9	639.9	699.9	773.9	849.9	843.9	843.9
22.5°	649.9	651.9	639.9	635.9	633.9	651.9	711.9	813.9	901.9	913.9	909.9
25°	703.9	705.9	701.9	689.9	673.9	677.9	733.9	845.9	973.9	993.8	989.8
27.5°	793.9	791.9	781.9	767.9	743.9	725.9	767.9	869.9	1029.8	1063.8	1053.8
30°	883.9	877.9	863.9	845.9	823.9	789.9	809.9	915.9	1099.8	1131.8	1109.8
32.5°	993.8	981.8	985.8	957.9	911.9	857.9	853.9	957.9	1155.8	1201.8	1183.8
35°	1133.8	1119.8	1099.8	1073.8	1029.8	957.9	935.9	1025.8	1249.8	1283.8	1283.8
37.5°	1317.8	1331.8	1307.8	1199.8	1151.8	1083.8	1037.8	1095.8	1331.8	1413.8	1393.8
40°	1505.8	1517.8	1473.8	1393.8	1289.8	1205.8	1177.8	1209.8	1455.8	1553.8	1515.8
42.5°	1657.7	1673.7	1657.7	1553.8	1471.8	1363.8	1313.8	1343.8	1615.8	1733.7	1683.7
45°	1817.7	1833.7	1815.7	1747.7	1667.7	1605.8	1479.8	1517.8	1783.7	1959.7	1903.7
47.5°	1937.7	1957.7	1925.7	1911.7	1847.7	1837.7	1623.8	1665.7	1959.7	2187.7	2117.7
50°	1965.7	1987.7	2015.7	2031.7	2009.7	2033.7	1817.7	1853.7	2143.7	2397.6	2329.6
52.5°	1899.7	1921.7	1983.7	2057.7	2159.7	2231.7	2013.7	2043.7	2335.6	2571.6	2535.6
55°	1705.7	1725.7	1851.7	1951.7	2195.7	2313.6	2201.7	2327.6	2473.6	2753.6	2665.6
57.5°	1379.8	1403.8	1569.8	1723.7	2075.7	2267.7	2313.6	2563.6	2701.6	2887.6	2785.6
60°	979.8	993.8	1137.8	1409.8	1743.7	2037.7	2291.6	2739.6	2881.6	3067.5	3013.5
62.5°	563.9	575.9	725.9	981.8	1315.8	1701.7	2193.7	2905.6	3075.5	3265.5	3235.5
65°	373.9	377.9	479.9	619.9	855.9	1253.8	1945.7	3053.5	3267.5	3423.5	3389.5
67.5°	246.0	268.0	347.9	443.9	547.9	693.9	1585.8	3115.5	3487.5	3643.4	3635.4
70°	176.0	184.0	250.0	341.9	411.9	389.9	927.9	2677.6	3477.5	3703.4	3637.4
72.5°	104.0	112.0	166.0	256.0	324.0	248.0	433.9	1893.7	2881.6	2955.5	2937.5
75°	76.0	76.0	102.0	184.0	236.0	178.0	204.0	1197.8	1913.7	2077.7	2075.7
77.5°	54.0	56.0	70.0	110.0	182.0	130.0	112.0	665.9	1045.8	1143.8	1089.8
80°	32.0	34.0	48.0	66.0	132.0	94.0	74.0	304.0	401.9	405.9	385.9
82.5°	24.0	24.0	32.0	46.0	92.0	64.0	46.0	116.0	130.0	118.0	100.0
85°	14.0	12.0	24.0	34.0	54.0	36.0	32.0	54.0	60.0	44.0	40.0
87.5°	4.0	4.0	10.0	12.0	24.0	20.0	14.0	20.0	28.0	16.0	12.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	609.9	609.9	609.9	609.9	609.9	609.9	609.9	609.9	609.9	609.9	609.9
2.5°	613.9	607.9	597.9	593.9	579.9	573.9	569.9	559.9	561.9	555.9	555.9
5°	607.9	607.9	587.9	565.9	543.9	529.9	513.9	493.9	493.9	485.9	487.9
7.5°	629.9	613.9	587.9	547.9	511.9	479.9	465.9	445.9	433.9	427.9	427.9
10°	643.9	627.9	583.9	535.9	489.9	449.9	419.9	391.9	375.9	375.9	373.9
12.5°	681.9	657.9	599.9	533.9	465.9	405.9	359.9	327.9	306.0	290.0	294.0
15°	713.9	687.9	607.9	517.9	423.9	339.9	284.0	224.0	194.0	178.0	172.0
17.5°	763.9	715.9	625.9	489.9	359.9	266.0	184.0	134.0	122.0	120.0	120.0
20°	805.9	749.9	627.9	435.9	296.0	170.0	118.0	110.0	104.0	102.0	100.0
22.5°	863.9	793.9	619.9	373.9	212.0	114.0	100.0	92.0	88.0	82.0	82.0
25°	923.9	851.9	603.9	316.0	130.0	98.0	88.0	80.0	72.0	68.0	70.0
27.5°	987.8	895.9	557.9	246.0	100.0	86.0	72.0	66.0	62.0	60.0	60.0
30°	1039.8	923.9	489.9	164.0	90.0	76.0	64.0	58.0	54.0	52.0	52.0
32.5°	1077.8	947.9	413.9	110.0	82.0	68.0	58.0	52.0	48.0	46.0	46.0
35°	1141.8	965.9	343.9	94.0	74.0	60.0	50.0	46.0	42.0	42.0	42.0
37.5°	1239.8	989.8	274.0	86.0	68.0	54.0	48.0	42.0	40.0	38.0	38.0
40°	1325.8	1019.8	196.0	78.0	62.0	50.0	42.0	38.0	36.0	34.0	34.0
42.5°	1449.8	1053.8	128.0	70.0	56.0	46.0	38.0	34.0	32.0	30.0	30.0
45°	1607.8	1109.8	100.0	62.0	50.0	42.0	36.0	32.0	28.0	28.0	26.0
47.5°	1775.7	1177.8	90.0	58.0	46.0	38.0	32.0	28.0	26.0	24.0	24.0
50°	1931.7	1243.8	84.0	54.0	42.0	36.0	30.0	26.0	22.0	20.0	20.0
52.5°	2071.7	1305.8	80.0	50.0	40.0	32.0	26.0	22.0	20.0	18.0	18.0
55°	2145.7	1333.8	78.0	48.0	36.0	30.0	24.0	20.0	18.0	16.0	16.0
57.5°	2261.7	1369.8	76.0	46.0	34.0	26.0	22.0	18.0	16.0	14.0	14.0
60°	2449.6	1487.8	74.0	44.0	32.0	26.0	20.0	16.0	12.0	10.0	10.0
62.5°	2605.6	1585.8	66.0	38.0	28.0	22.0	16.0	12.0	8.0	6.0	6.0
65°	2783.6	1631.7	58.0	34.0	24.0	18.0	12.0	8.0	6.0	2.0	2.0
67.5°	2977.5	1701.7	48.0	30.0	22.0	14.0	10.0	6.0	2.0	0.0	0.0
70°	2875.6	1613.8	40.0	26.0	20.0	12.0	8.0	4.0	0.0	0.0	0.0
72.5°	2253.7	1155.8	32.0	24.0	18.0	12.0	8.0	2.0	0.0	0.0	0.0
75°	1505.8	653.9	28.0	20.0	14.0	10.0	6.0	2.0	0.0	0.0	0.0
77.5°	817.9	294.0	24.0	18.0	12.0	8.0	6.0	2.0	0.0	0.0	0.0
80°	266.0	116.0	20.0	16.0	12.0	8.0	6.0	2.0	0.0	0.0	0.0
82.5°	72.0	36.0	20.0	16.0	12.0	8.0	6.0	2.0	0.0	0.0	0.0
85°	30.0	24.0	20.0	16.0	12.0	8.0	6.0	2.0	0.0	0.0	0.0
87.5°	12.0	8.0	8.0	10.0	8.0	6.0	4.0	2.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	185°	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°
0°	609.9	609.9	609.9	609.9	609.9	609.9	609.9	609.9	609.9	609.9	609.9
2.5°	557.9	561.9	563.9	563.9	573.9	583.9	595.9	605.9	605.9	611.9	617.9
5°	489.9	493.9	499.9	517.9	537.9	559.9	581.9	597.9	619.9	629.9	635.9
7.5°	433.9	437.9	453.9	471.9	499.9	537.9	575.9	611.9	633.9	643.9	651.9
10°	375.9	381.9	399.9	431.9	467.9	513.9	557.9	619.9	655.9	675.9	683.9
12.5°	292.0	308.0	331.9	365.9	411.9	481.9	563.9	627.9	689.9	713.9	729.9
15°	184.0	198.0	236.0	290.0	351.9	433.9	547.9	639.9	725.9	749.9	775.9
17.5°	118.0	120.0	132.0	190.0	270.0	373.9	523.9	657.9	765.9	799.9	839.9
20°	100.0	104.0	106.0	114.0	180.0	308.0	473.9	679.9	813.9	859.9	897.9
22.5°	84.0	86.0	90.0	96.0	108.0	224.0	405.9	679.9	855.9	923.9	967.9
25°	68.0	72.0	76.0	82.0	94.0	140.0	335.9	667.9	905.9	989.8	1045.8
27.5°	60.0	60.0	64.0	70.0	80.0	98.0	266.0	631.9	943.9	1029.8	1103.8
30°	52.0	54.0	56.0	62.0	72.0	86.0	184.0	573.9	983.8	1107.8	1191.8
32.5°	46.0	46.0	50.0	54.0	64.0	78.0	118.0	485.9	1035.8	1167.8	1285.8
35°	42.0	42.0	44.0	48.0	58.0	70.0	92.0	411.9	1097.8	1281.8	1411.8
37.5°	38.0	38.0	40.0	44.0	52.0	62.0	84.0	353.9	1161.8	1395.8	1585.8
40°	34.0	34.0	36.0	40.0	46.0	56.0	76.0	286.0	1241.8	1563.8	1775.7
42.5°	30.0	30.0	32.0	36.0	42.0	50.0	66.0	214.0	1347.8	1745.7	2021.7
45°	26.0	26.0	28.0	32.0	36.0	46.0	60.0	164.0	1463.8	1947.7	2237.7
47.5°	22.0	24.0	26.0	30.0	34.0	42.0	54.0	144.0	1577.8	2161.7	2477.6
50°	20.0	20.0	22.0	26.0	32.0	38.0	50.0	142.0	1693.7	2325.6	2723.6
52.5°	18.0	18.0	20.0	24.0	30.0	36.0	48.0	146.0	1789.7	2477.6	2895.6
55°	16.0	16.0	18.0	20.0	26.0	34.0	44.0	150.0	1857.7	2631.6	3033.5
57.5°	14.0	14.0	16.0	20.0	24.0	30.0	40.0	154.0	1967.7	2783.6	3233.5
60°	10.0	10.0	14.0	18.0	22.0	26.0	38.0	158.0	2143.7	2993.5	3403.5
62.5°	6.0	6.0	8.0	14.0	18.0	24.0	34.0	150.0	2307.6	3263.5	3663.4
65°	2.0	4.0	6.0	8.0	14.0	20.0	28.0	136.0	2445.6	3533.5	3903.4
67.5°	0.0	0.0	2.0	6.0	12.0	16.0	24.0	100.0	2467.6	3655.4	4149.4
70°	0.0	0.0	2.0	6.0	10.0	16.0	22.0	56.0	2101.7	3265.5	3803.4
72.5°	0.0	0.0	0.0	4.0	10.0	14.0	20.0	42.0	1549.8	2461.6	3005.5
75°	0.0	0.0	0.0	2.0	8.0	12.0	18.0	32.0	941.9	1641.7	1961.7
77.5°	0.0	0.0	0.0	2.0	6.0	12.0	18.0	28.0	331.9	781.9	921.9
80°	0.0	0.0	0.0	4.0	8.0	12.0	16.0	24.0	80.0	196.0	264.0
82.5°	0.0	0.0	0.0	2.0	6.0	10.0	14.0	20.0	32.0	58.0	92.0
85°	0.0	0.0	0.0	2.0	4.0	10.0	14.0	18.0	22.0	28.0	40.0
87.5°	0.0	0.0	0.0	0.0	2.0	4.0	6.0	8.0	8.0	8.0	14.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	276°	285°	295°	305°	315°	325°	335°	345°	355°	360°
0°	609.9	609.9	609.9	609.9	609.9	609.9	609.9	609.9	609.9	609.9
2.5°	615.9	623.9	627.9	635.9	639.9	637.9	635.9	641.9	637.9	631.9
5°	637.9	637.9	643.9	645.9	645.9	639.9	643.9	641.9	637.9	637.9
7.5°	661.9	671.9	671.9	659.9	657.9	653.9	653.9	637.9	631.9	637.9
10°	685.9	693.9	695.9	681.9	663.9	655.9	645.9	625.9	615.9	619.9
12.5°	735.9	735.9	713.9	697.9	673.9	645.9	621.9	593.9	579.9	583.9
15°	771.9	779.9	749.9	713.9	671.9	619.9	593.9	571.9	563.9	557.9
17.5°	841.9	825.9	777.9	725.9	665.9	611.9	593.9	573.9	567.9	567.9
20°	901.9	893.9	821.9	727.9	663.9	627.9	615.9	605.9	603.9	597.9
22.5°	983.8	947.9	855.9	749.9	685.9	653.9	649.9	659.9	653.9	649.9
25°	1045.8	1015.8	881.9	781.9	719.9	709.9	715.9	725.9	709.9	703.9
27.5°	1129.8	1073.8	931.9	823.9	765.9	775.9	795.9	797.9	787.9	793.9
30°	1207.8	1147.8	969.9	871.9	843.9	853.9	883.9	905.9	891.9	883.9
32.5°	1319.8	1227.8	1045.8	951.9	941.9	967.9	1001.8	1015.8	997.8	993.8
35°	1437.8	1319.8	1123.8	1041.8	1059.8	1095.8	1125.8	1149.8	1121.8	1133.8
37.5°	1621.8	1467.8	1255.8	1183.8	1191.8	1205.8	1261.8	1327.8	1341.8	1317.8
40°	1813.7	1627.7	1377.8	1321.8	1339.8	1377.8	1443.8	1505.8	1537.8	1505.8
42.5°	2035.7	1781.7	1565.8	1499.8	1517.8	1571.8	1659.7	1709.7	1705.7	1657.7
45°	2309.6	1995.7	1741.7	1659.7	1725.7	1773.7	1861.7	1867.7	1829.7	1817.7
47.5°	2519.6	2175.7	1931.7	1879.7	1969.7	1971.7	1991.7	1993.7	1951.7	1937.7
50°	2751.6	2383.6	2143.7	2067.7	2219.7	2149.7	2095.7	2059.7	1995.7	1965.7
52.5°	2979.5	2531.6	2339.6	2261.7	2419.6	2233.7	2135.7	2025.7	1931.7	1899.7
55°	3101.5	2775.6	2625.6	2443.6	2463.6	2257.7	2011.7	1873.7	1713.7	1705.7
57.5°	3245.5	2939.5	2867.6	2567.6	2389.6	2089.7	1753.7	1571.8	1399.8	1379.8
60°	3415.5	3199.5	3123.5	2547.6	2127.7	1755.7	1389.8	1155.8	993.8	979.8
62.5°	3605.4	3507.5	3281.5	2351.6	1689.7	1235.8	917.9	721.9	571.9	563.9
65°	3905.4	3765.4	3365.5	1979.7	1117.8	791.9	609.9	467.9	377.9	373.9
67.5°	4093.4	3863.4	3177.5	1411.8	619.9	523.9	427.9	339.9	262.0	246.0
70°	3827.4	3545.5	2513.6	807.9	359.9	397.9	329.9	228.0	180.0	176.0
72.5°	3057.5	2631.6	1691.7	379.9	224.0	312.0	240.0	154.0	108.0	104.0
75°	2085.7	1655.7	1061.8	176.0	158.0	228.0	176.0	90.0	76.0	76.0
77.5°	931.9	843.9	543.9	108.0	118.0	174.0	102.0	62.0	56.0	54.0
80°	284.0	298.0	222.0	74.0	88.0	132.0	62.0	42.0	34.0	32.0
82.5°	96.0	112.0	100.0	44.0	60.0	94.0	42.0	28.0	24.0	24.0
85°	46.0	56.0	50.0	28.0	32.0	46.0	34.0	22.0	14.0	14.0
87.5°	18.0	26.0	18.0	12.0	18.0	24.0	14.0	10.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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